OPERATING INSTRUCTIONS

idromed® 5 GS

Art.-No. 100001
Art.-No. 100003

Before putting the unit into operation and starting treatment, read this operating manual carefully.

#100001/3 / S0408 e

Supplied Items

Please ensure that all items are present

- **idromed® 5 GS** (basic unit)
- power supply
- 2 x aluminium plate electrodes nickel free
- 2 x electrode cables
- 2 x distance grids
- shock-proof case
  the 2 parts of the case are used as treatment tubs

optional accessories:

- 2 x nickel-free electrodes with sponges (from eudermic material) for treatment of the armpits
- 2 x large treatment tubs (art.-no. 995130)
- 2 x distance grids for large treatment tubs (art.-no. 995131)

Content

1. Important information on idromed® 5 GS 3
1.1. Safety information 3
1.2. Symbols and warning on the unit 4
1.3. Electromagnetical compatibility 4
2. Application of the idromed® 5 GS 5
2.1. Fields of Application 5
2.2. Conditions of Application 5
2.3. Preparation of the Treatment 5
2.4. Treatment 6
2.4.1. Treatment of hyperhidrosis on the hands and/or feet 6
2.4.2. Treatment of hyperhidrosis at the armpits 8
3. Important Tips and Information 9
4. Problems and how to solve them 10
5. Cleaning and Care 11
6. Maintenance 11
7. Warranty and Liability 11
8. Technical Data 12

1. IMPORTANT INFORMATION ON IDROMED® 5 GS

1.1. SAFETY INFORMATION

Symbol for important safety instructions. Please follow these instructions carefully to prevent health risks and damage to property.

In case of the following conditions the idromed® 5 should not be used or should only be used after consulting your doctor:

- **cardiac arrhythmia**
- **electronically controlled implanted devices (e.g. pacemaker)**
- **metallic implanted devices in the area where the current flows**
- **metallic intrauterine implanted devices (loop)**
- **pregnancy**
- **bigger skin diseases**
- **insensitivity to pain**

Prolonged usage of high frequency surgery units on a patient can cause burns under electrodes.

Application of the electrodes close to the ribcage can increase the risk of ventricular fibrillation.

Effective current densities over 2 mA/cm² at all electrode faces require higher attention from the user.

During treatment the electric circuit needs to be completed constantly . i.e. maintain at least one hand or foot in each tub.

Conductive material (e.g. metal, water pipes etc.) must not be touched during treatment.

All jewellery on hands and feet must be removed before starting treatment.

Any damage to skin (minor injuries, scratches etc.) on the palms of the hands, soles of the feet, cuticles or at the armpits must be coated with vaseline or a fatty cream before treatment, as current permeability will be higher than normal on those spots. Please do only cover these spots!

Current intensity is set according to individual requirements of the user. The ideal current intensity evokes a pleasant, tingling sensation (not on the treatment of the armpits). The values listed in these instructions are the maximum values allowed. Current intensity chosen by the user, however, should normally be much lower, otherwise there is a danger of burning the skin (e.g. the usual range for the treatment of the armpits is about 1 – 2 mA).

Moisten the sponges from inside and outside, until they don't drip (do not wring them out) If the sponges are too dry, there is a danger of burns

Attention, there is a danger of burns, when the metallic electrodes are in direct contact with the skin. When treating armpits, the sponge electrodes have to be kept still and with constant pressure under the armpits, otherwise fluctuations of current will occur on the display of the unit.

Never short-circuit the metallic electrodes.

Proper use

The **idromed® 5 GS** is an iontophoresis unit for the treatment of hyperhidrosis on the hands and feet and in the armpits.

The operator undertakes to observe the prescribed schedule for inspection and maintenance work and the replacement of consumables.

The observance of the safety instructions and regulations in these operating instructions and the accident-prevention rules and regulations prevailing at the place of use belong to the proper use of the unit.

The company Dr. K. Hönle Medizintechnik GmbH shall not be liable for any damage caused by improper use of the equipment.

1.2. SYMBOLS AND WARNING ON THE UNIT

+ **Anode**

− **Cathode**

Attention! See operating instructions!

Application device of type BF

~ **Alternating current**

Units of protection class II

Ecology

Unit contains electronic parts and may not be disposed of in household rubbish.

1.3. ELECTROMAGNETICAL COMPATIBILITY

idromed® 5 GS uses high frequency energy exclusively for its internal function. Therefore its HF-emission is very low and it is unlikely that surrounding electronic devices are disturbed. (HF-emissions acc. to CISPR 11, group 1)

idromed® 5 GS is determined for the use in all facilities, including residential areas and such facilities connected directly to an official supply network, which also supplies buildings and residential buildings. (HF-emissions acc. to CISPR 11, class B)

Portable and mobile radios should not be used at a closer distance to the **idromed® 5 GS** including cables than the recommended security distances in the table below:

Nominal capacity of the transmitter	**Security distance depending on the transmitter frequency m**		
	150 kHz - 80 MHz	**80 MHz - 800 MHz**	**800 MHz - 2,5 GHz**
0,01	0,12 m	0,12 m	0,23 m
0,1	0,37 m	0,37 m	0,74 m
1	1,17 m	1,17m	2,33 m
10	3,70 m	3,70 m	7,37 m
100	11,7 m	11,7 m	23,3 m

2. APPLICATION OF THE IDROMED® 5 GS

2.1. FIELDS OF APPLICATION

Condition: Used for the treatment of the following conditions:

- Hyperhidrosis

2.2. CONDITIONS OF APPLICATION

idromed® 5 GS has been designed for operation in dry rooms with an ambient temperature from 10°C to 45°C.

Protect the unit against chemical vapours and never operate it in explosive areas.

2.3. PREPARATION OF THE TREATMENT

The **idromed® 5 GS** is operated with the power supply (IDROMED AC/AC ADAPTER, Typ: FM 6299M). After the following preparations your unit is ready for use:

a) For the best results and for your own security, the unit should only be used with original accessories from the manufacturer.

b) For treatment you should separate the two parts of the case. To do this, open the case completely, put it on a plain surface and separate the 2 parts carefully in opposite directions (see arrows on the hinges on the case).

c) Fill the 2 treatment tubs with tap water to a depth of approx. 3-4 cm (finger and toe joints should be just covered). Please see also the warnings on page 10, point 4.3.

d) Connect one of the cables to one of the plate electrodes and to the **(+)-**connection on the front of the **idromed® 5 GS**.

e) Connect the 2nd cable of the electrode with the other electrode and with the **(-)**-connection on the front of the **idromed® 5 GS**.

f) Place the electrodes 1 in each tub and cover the electrodes with the distance grids.

g) Connect the plug of the power supply to the rear of the **idromed® 5 GS** and plug the power supply to a mains socket (220-230 V / 50 Hz). The green control lamp on the power pack is now alight.

2.4. TREATMENT

If possible, treatment should be performed once a day initially. Treatment should last 10-15 minutes, depending on the doctor's prescription. Normally, after 10 - 15 treatments, a normal hydrosis level is reached and the skin moisture is normalized. The intervals of treatment should now be extended gradually. (1st week - every 2 days, 2nd week - every 3 days, until there is just one treatment per week)

The inhibition of sweating is much more pronounced at the plus pole than at the minus pole. **In order to optimize the therapeutic effect, you should therefore switch polarities before every 5th treatment session.** To do this, all you have to do is swap the electrode leads.

The **maximum values** permissible are:

- For the treatment of the hands: **15 mA**
- For the treatment of the feet or of hands and feet: **25 mA**
- For the treatment of the armpits: **5 mA**

If the current intensity selected is too high, you may experience an unpleasant tingling sensation in the extremities treated during the session. If this occurs, a lower current intensity has to be selected otherwise there is a danger of burns.

2.4.1. TREATMENT OF HYPERHIDROSIS ON THE HANDS AND/OR FEET

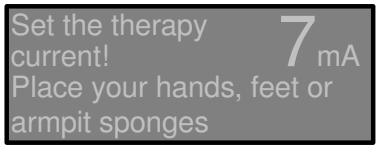
⚠ **Do not switch off the unit during treatment.**

Separate the two parts of the case (treatment tubs) as described in point 2.3.b) and place in front of the **idromed® 5 GS** on the table. Connect the electrodes as described in point 2.3.

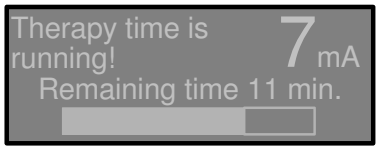
Switch on the unit by pushing down the dark grey current intensity knob.

Check that the intensity knob is on switch setting (●).

The unit carries out a self-test. This action takes some seconds.



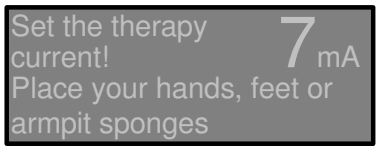
Adjust the required current intensity with the knob. A turn to right increases the current intensity. A turn to left decreases it. Please note also the maximum values permissible. (see point 2.4.)



Complete the circuit. For this put each hand or foot in the water-filled treatment tubs. The correct intensity of current is achieved when you experience a pleasant tingling sensation.

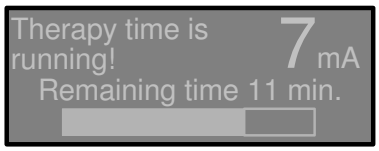
If you do not experience a tingling sensation or the intensity of current is too high the current intensity should be adjusted accordingly.

For treatment of feet turn the knob right or left to the desired value (tingling sensation).



For treatment of the hands adjustments should be made by another person or you would break the circuit by taking one hand out of the tubs.

Whilst adjusting the current, hands may be taken out of the treatment tubs and while the unit is still running without any danger.

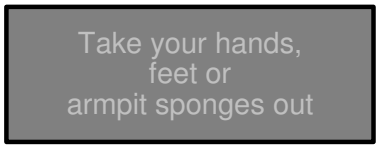


⚠ **Please dry your hands before regulating the current at the unit.**

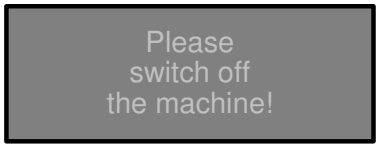
Regulate the current by turning the knob right or left and close the circuit again by putting again your hands in the treatment tubs. Repeat this process until you feel a tingling sensation with the adjusted current.

Therapy time takes 15 minutes.

If there is a breaking in treatment, the unit retains the remaining treatment time.



At the end of the treatment time take your hands and/or feet out of the treatment tubs.



Turn the knob to the switch setting (●) and switch off the unit by pushing down the knob.

If you need to treat both hands and feet simultaneously, take one treatment tub for your hands and the other treatment tub for your feet.

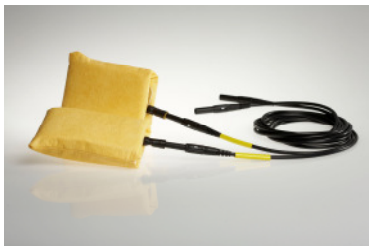
⚠ **Check after the switching-on of the unit and the self-test always the position of the turning knob. (Position ●)**

After each session, please empty the tubs and dry the tubs, the electrodes and the cable with a towel.

2.4.2. TREATMENT OF HYPERHIDROSIS AT THE ARMPITS

Before the treatment clean the armpits with clear water, in order to remove any cosmetics and so to avoid any irritation of the skin.

For treatment of the armpits use the 2 optional sponge electrodes with the sponges:



optional accessory

armpit electrodes with sponges

(art.-no. 995100)

Do not switch off the unit during treatment.

Moisten the sponges together with the electrodes in a water bath for about 30 seconds. Press the water from the sponges until they do not drip (**do not wring them out**). The more water remains in the sponges, the better the current will be directed to the areas which have to be treated.

There is a danger of burns, if the sponges are too dry.

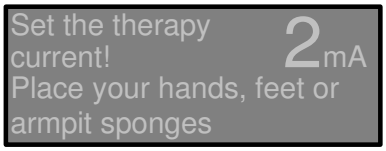
Attention, there is a danger of burns, if the metallic electrodes are in direct contact with the skin.

Use the 2 electrode cables to connect the electrodes with the positive and the negative pole of the unit.

Switch on the unit by pushing down the turning knob.

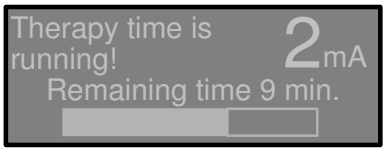
Pay attention that the turning knob is on switch setting (●).

The unit carries out a self-test. This action takes some seconds.



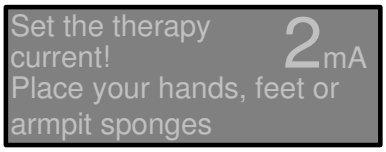
Adjust the required current intensity with the turning knob. A turn to right increases the current intensity. A turn to left decreases it. Please note also the maximum values permissible. (for the treatment of the armpits max. 5 mA; ideal 1 – 2 mA)

Complete the circuit. For this put one sponge electrode under each armpit.



Attention! Because of the compression, water may leak from the sponge electrodes. Put for example a towel underneath to absorb the water.

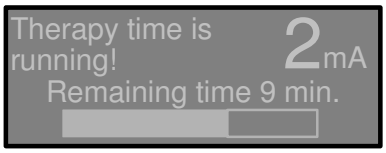
For an optimal accomplishment of the treatment of the armpits, please proceed as follows:-



Regulate the current by turning the knob right or left until you feel a soft tingling sensation at the armpits.

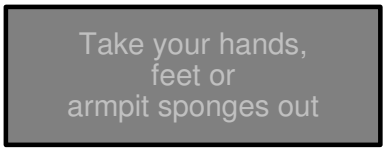
Turn the knob to the left until the tingling sensation ends. Go through with the treatment with this determined current intensity.

When treating (15 minutes) the armpits, the sponge electrodes have to be kept still and with constant pressure under the armpits. Otherwise there will occur fluctuations of current at the display of the unit or the unit can display a malfunction information.

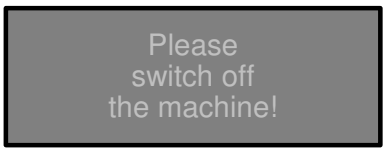


If there is a break in treatment, the unit retains the remaining treatment time.

⚠ **If you feel a tingling sensation or burning, the current intensity is too high and must be scaled down.**



At the end of the treatment remove the sponge electrodes from the armpits.



Turn the knob to the switch setting (●) and switch off the unit by pushing down the knob.

⚠ **Always check the position of the turning knob. (Position ●) immediately after switching on the unit and the self-test completes.**

3. IMPORTANT TIPS AND INFORMATION

- To simplify therapy the current intensity in mA for your treatment (pleasant tingling sensation – aside from the treatment of the armpits) is displayed and can be set again consistently.
- The maximum current and voltage are limited by safety limits prescribed for electrical medical equipment. Nevertheless, do not remove your hand and/or feet from treatment tubs during the session (keep the current circuit closed). Take care, that the unit is not switched off during treatment.
- The inhibition of sweating is much more pronounced at the positive pole than at the negative pole. In order to optimize the therapeutic effect, you should therefore switch polarities before every 5th treatment session. To do this, you have only to swap the electrode leads.
- Please take care, that the water you are using is normal tap water and has not been treated with a water softener before. That reduces the conductibility of water and treatment can be make only conditional or none.

4. PROBLEMS AND HOW TO SOLVE THEM

PROBLEM	SOLUTION
4.1. The green lamp on the mains plug (IDROMED ADAPTER) does not work.	In brightly lit rooms, it can be difficult to see whether the lamp is on or not. Shade the lamp with your hand to check, whether it is working properly. The wall socket may be defective. Please connect the unit to another wall socket or check whether the wall socket in question is working properly.
4.2. The unit shows on the display: Malfunction! Switch off the machine!	At a failure malfunction the unit's output current stops automatically and the unit displays a malfunction message. Switch off the unit and switch it on again. If the error lamp is still alight, please contact Customer Services.
4.3. Current intensity is adequate.	Check the connections of the plug and electrodes and the function of the unit. Please check if the water you are using has been treated with a water softener. By using softened water, the conductivity is reduced. In this case please use untreated tap water or use non-carbonated (still) mineral or table water. For the treatment of the armpits, check if the sponges are still moist enough, as in the description under point 2.4.2. If current intensity is not adequate despite the above mentioned points, please contact the Customer Service.
4.4. The display shows nothing.	Check if the lamp is lit on the plug unit (see point 4.1.). Check the functioning of the socket. Press the on/off switch several times (turning knob). If you have further problems please send the unit to the manufacturer for repair.

If you have further problems or to order spare parts please apply to your locally retailer.

5. CLEANING AND CARE

After each treatment session, empty the treatment tubs and dry the tubs, the electrodes and the cable with a towel. Disinfect the treatment set regularly with a normal commercial disinfectant.

Discoloration of the surface of electrodes after the initial therapy sessions are quite normal.

6. MAINTENANCE

The manufacturer recommends to check the unit every 2 years through our customer service . This applies only to commercial users. Nevertheless we generally recommend the same procedure also to private users.

7. WARRANTY AND LIABILITY

Generally, the general Terms of Sales and Delivery of the company Dr. K. Hönle Medizintechnik GmbH shall apply. These shall be submitted to the operator upon the signing of the contract at the very latest. The warranty for the **idromed® 5 GS** is 24 months. Warranty and liability claims are excluded in case of personal injury or damage of property if these are attributable to one or more of the following causes:

- The use of the **idromed® 5 GS** for a purpose other than that for which it is intended
- Unauthorized structural modifications on the **idromed® 5 GS**
- Failure to observe the information contained in the Operating instructions on the commissioning, maintenance and operation of the unit
- Repair work performed by persons not authorized by the company Dr. K. Hönle Medizintechnik GmbH
- Catastrophes caused by foreign bodies or acts of God

8. TECHNICAL DATA

Type	**idromed® 5 GS**
Art.-no.	100001 100003 (GB)
Dimensions of the unit	210 mm x 120 mm x 70 mm (L x W x D)
Dimensions of the suitcase	290 mm x 390 mm x 110 mm (L x W x D)
Total weight (unit, suitcase and accessories)	2,5 kg
Current supply	Power pack (230 V~ / 50 Hz), Type: FM 6299M
Fan-Out current	25 mA an 2 kΩ infinitely variable from 0 – 25 mA
Accuracy	± 0,5%
Nominal input voltage	24 V ~
Fuse protection	The unit has an electronic current limiting device. In the event of a functional error the output current is automatically cut off and the orange lamp will be alight. Once the unit has been switched off, the lamp will be out.
Protection class	II, all insulated
MDD classification	Iia
Protection against intrusion of liquids	IPX1
CE-Mark	CE 0123
Manufacturer	A.L.T. Lichttherapietechnik GmbH Thura Mark 10 D-06780 Zörbig
Exclusive sales	Dr. K. Hönle Medizintechnik GmbH Viktor-Frankl-Str. 20 D-86916 Kaufering Tel.: 0049 8191-30555-0 Fax: 0049 8191-30555-50 E-Mail: medizin@drhoenle.de http://www.drhoenle.de

(Subject to technical alterations!)